

ART. XX.—*Description of an Undescribed Barnacle of the Genus Scalpellum from New Zealand.*

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Communicated by Professor W. B. Benham.

[Read before the Otago Institute, 5th July, 1910.]

IN a collection of barnacles from New Zealand recently sent me by Professor W. B. Benham there is a large *Scalpellum*, labelled "*Scalpellum spinosus*," without further data. As this specimen represents a species hitherto undescribed, and as the name has not already been used in the genus, the species may be described as—

Scalpellum (Smilium) spinosum sp. nov.

Capitulum broad, compressed as a whole, but somewhat swollen at the base; the occludent margin vertical, slightly sinuous; the earinal margin feebly curved. Fifteen smooth pinkish valves present, covered with a minutely hairy translucent brownish membrane. *Terga* large, lozenge-shaped, slightly retroverted in the upper third, extending far beyond the carina. *Scuta* broadly triangular, with the bases rounded and tangential to the base of the capitulum; the tips not overlapping the terga. *Carina* short, nearly straight, ridged dorsally but not laterally; the sides of its upper half concave; the base bluntly pointed between the carinal latera.

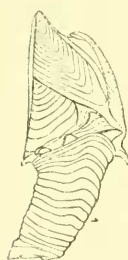


FIG. 1.



FIG. 2.



FIG. 3.

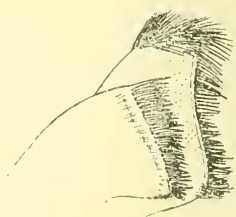


FIG. 4.

Fig. 1. *Scalpellum spinosum*; half natural size.

Fig. 2. Portion of the peduncle; $\times 4$. (The bands of blunt calcareous spines alternate with bare areas, which are here shaded.)

Fig. 3. Mandible; $\times 15$.

Fig. 4. First and second maxillae; $\times 15$.

Upper latera narrowly triangular, the scutal and lower margins being curved and much longer than the carinal; the scutal angle pointing towards the lateral angle of the scuta. *Rostrum*, *latera of the basal whorl*, and *subcarina* prominent, pointed, spinelike.

Peduncle stout, barely longer than the capitulum, surrounded by numerous sinuous or angulate furrows that separate ridges in which the very numerous peduncular plates are imbedded; these in the form of minute blunted calcareous spines.

Limbs, &c.—*Cirri* colourless, rather short and by no means strongly curved, with a luxuriant fringe on the anterior and well-developed bunches of hairs on the posterior margin. The two rami of the first cirrus subequal, slender, pointed; the first cirrus not widely separated from the second. *Anal appendages* with one joint, which bears a tuft of short hairs at the tip and does not reach the end of the first joint of the protopodite of the sixth cirri. *Penis* rather short, stout at the base, contorted.

Mouth Parts.—*Labrum* slightly bullate, not much produced. *Mandible* with six main teeth in addition to the inner angle; the outermost tooth slightly larger than the second, which is much smaller than the others; the third, fourth, fifth, and sixth subequal; small subsidiary teeth also present between the first and the second and at the outer base of the sixth; the inner angle blunt (perhaps sometimes bifid), bearing several short bristles. *Maxilla* with the free edge straight, bearing a row of bristles of different sizes that decrease gradually from without inwards; inner angle rounded. *Second maxilla* broad, with the free edge slightly sinuous, bearing a fringe of long hairs.

Length of capitulum, 40 mm.; breadth of capitulum at base, 25 mm.

Scalpellum spinosum closely resembles my *S. kampeni*, which occurs off the east coast of Sumatra, at Singapore, and in the Gulf of Siam. From this species it differs not only in its greater bulk, but also as regards the structure of its mouth parts and in the much greater profusion, more regular arrangement, and smaller size of its peduncular plates. The scutum is also broader, and the tergum differs in being retroverted. In the only specimen examined there is no dwarf male.

[*Locality.*—Note by Professor Benham.—The specimen forwarded to Dr. A. Annandale was one of a number received by me in 1899 from Mr. Cox, who was then light-keeper at Farewell Spit, Nelson. The same species was obtained off Stewart Island during the cruise of the "Nora Niven."]]

ART. XXI.—*Notes on the Saddleback of New Zealand* (Creadion carunculatus).

By W. W. SMITH, F.E.S.

[*Read before the Manawatu Philosophical Society, 17th March, 1910.*]

A YEAR ago Mr. S. Percy Smith, F.R.G.S., ex-Surveyor-General of New Zealand and distinguished Maori scholar and historian, informed me that when surveying in parts of the North Island many years ago he occasionally observed flights of the popokatea, or whiteheads (*Clitonyx albicapilla*), being followed by saddlebacks in their gregarious migrations through the native forests. This peculiar habit of the saddleback, or native starling, in following flights of, and associating with, other species of birds in the forests was first observed and reported by the gold-diggers during the gold-rush in the great forests of the west coast of the South Island, nearly fifty